

**Vienna Instruments**  
**Solo Download Instruments**  
**Heckelphone**  
**Full Library**

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## Introduction

Welcome to the Vienna Symphonic Library, and thank you for purchasing one of our Solo Download Instruments! This document contains the mapping information for the "Full" version of the Vienna Instruments Heckelphone. You will find in it a comprehensive survey of the articulations/Patches content, a listing of abbreviations, and the mapping list proper which gives details for every Patch, Matrix, and Preset.

## "Full" Library

As opposed to the "Standard" versions of our Solo Download Instruments, the "Full" versions are identical with the corresponding instruments of a DVD Collection, i.e., they contain exactly the same samples, Patches, Matrices and Presets as the latter without any restrictions.

Installing a Download Instrument's Full version copies that instrument's sample content to a separate folder on your hard disk, so that it is not necessary to keep its Standard version installed – you may either delete it from your hard disk or at least remove it from the Directory Manager's list of activated instruments. In the Vienna Instruments Browser, the path of the Full version will be the same as that of the corresponding DVD Instrument, so that you can still see both versions as separate entries if you keep the Standard version installed.

## Data paths and Patch name conventions

Since the Full versions of Download Instruments conform to the corresponding DVD Instruments, the data paths in your Vienna Instruments browser will be different than those of Standard Download or Special Edition Instruments. For instance, the path of the Standard Download Library of Flute 1 is "02D Flute-1", and all Patches can be found in this folder regardless of the articulation group they belong to. The Patch number is also marked with a "D" so that you immediately know it is a Download Instrument. In the Vienna Special Edition, Flute 1 is located in the folder "11 Flutes" together with the other flutes. Here, the Patch number is marked with an "S". The Full Download of Flute 1 is located in the subfolder "32 Flute" of the section "Woodwind Patches", which again contains subfolders grouping the Patches according to type, e.g., "01 SHORT + LONG NOTES", "02 DYNAMICS", etc. Patch names of the Full Download Library may differ from the corresponding ones of the Standard Download Library.

While Full Download Instruments contain all articulations of the corresponding DVD Instruments, their Patches are not divided into Standard and Extended content. The list of articulations further down which gives a summary of the Library's contents.

Special Patch configurations which sometimes are part of a Standard Download Instrument may be found in a reserved folder called "98 RESOURCES" in the Full Instrument. E.g., Flute 1 Standard contains the Patch "22D FL1 legato-sus"; in Flute 1 Full, this Patch is called "01 FL1\_perf\_leg\_sustain" and is located in the Resources' subfolder "03 Perf Speed variation". (Apart from that, it also contains more samples.) Other articulations that can be found in the Resources folder are isolated dynamics repetitions in the subfolder "01 Perf Rep dyn" – e.g., the five repetitions of a legato crescendo, divided into separate Patches – and extracted velocity layers of sustained notes in the subfolder "02 Long Notes – Single Layer".

## Patch information

The Patch information includes articulation type, playing range, number of samples used, RAM requirements, the number of velocity layers and alternations, AB switching possibilities, etc., as well as Patch specific information if necessary.

Where the type of articulation requires a special mapping (e.g., natural harmonics patches), the mapping layout will be shown in a detailed graphic.

**Major and minor runs** are always mapped to the keys of their scale, as are **arpeggios** to the keys of the broken chord played. **Grace notes** and **mordents** are mapped to their target note, i.e., the note the articulation ends with. Due to their nature, all **upward and downward articulations** (e.g., fixed glissandos and octave runs) have different mapping ranges – the upward movements ending the involved interval below the Patch's upper mapping range, while downward movements end the interval above its lower mapping range. (Please note that not all of the articulations mentioned above may be contained in your Collection.)

The Patch information also lists a Patch's velocity layers in detail. Velocity layer switches generally are the same for patches with the same number of layers but may occasionally be adapted to the instrument's requirements:

Layers	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
2	1–88	89–127				
3	1–55	56–88	89–127			
4	1–55	56–88	89–108	109–127		
5	1–24	25–55	56–88	89–108	109–127	
6	1–24	25–55	56–88	89–108	109–118	119–127

## Interval performances

Interval performances are one of the outstanding features of our Vienna Instruments. They allow you to play authentic legato without any programming tricks. In our Silent Stage, all intervals from minor second to the octave were recorded for every instrument – up and down, of course; that makes 24 interval samples per note for one velocity alone! When you load an interval performance Patch and play a line on your keyboard, the software automatically joins the right samples with their interval transitions again, and you hear a perfect legato. By the way, this technique is not only used for legato but also for other articulations like the strings' portamento, marcato, or détaché and spiccato articulations.

Interval performances also contain at least two legato repetitions for every note which alternate automatically whenever you strike a key more than once. There also are preconfigured thresholds for legato and repetition notes: The legato threshold – i.e., the maximum break between notes where legato is played – is 50 ms. Otherwise, a sustained starting note will sound so that you can easily start a new phrase without leaving the legato Patch. For note repetitions, the threshold is 200 ms: a break up to that duration will yield a legato repetition; if the break is longer, a new starting note. But of course, it's mingling legato with other articulations which makes a piece really come alive.

Due to their nature, all interval performances are monophonic; otherwise, the software would have to be able to decide which source note belongs to which target note. To circumvent this, you can open two VI instances of the same instrument on separate MIDI tracks without any additional strain on your RAM.

*Note:* the Vienna Instruments PRO player software also allows you to play polyphonic Interval performances.

Another variety of interval performance you will come across is the "perf-leg\_sus" Patch. These Patches also contain normal legatos, only the target note of each interval is crossfaded into a looped sustain. They can be used for slower pieces with long notes; however, you should use them with circumspection, since plain legatos sound more lively because they not only render the interval transitions as they were played, but also have different target samples for every interval instead of the same sustained note: When you play, e.g., c–e and then c#–e with normal legato, you will get two different "e" tones; with sus-legato you won't.

## Matrix information

Each Matrix listing contains information regarding the Patches used for the Matrix, the number of horizontal and vertical dimensions, and switching properties. A mapping table shows the Cell positions for each of the Matrix' Patches.

**A/B switching** normally is set to A0 for upward/crescendo, and B0 for downward/diminuendo. However, some bass instruments go below that range so that the A/B keys have to be adapted accordingly. For example, the A/B switches for double bass are A0 and A#0 because the instrument's lower range extends to B0.

In order to facilitate working with **MIDI controller switches** like the Modulation wheel, the switching positions are not distributed equally across the controller range if they control more than two Matrix rows or columns; generally, the switching range will be narrower at the extreme positions because they are easy to set, and wider in the middle where it is harder to find the desired setting.

**Speed controller switches** naturally are adjusted to the Patches involved, and have been tested carefully as to their playability. However, if you find that they do not fit your playing, or want to try out other settings, you can change this as well as any other controller's settings at the **Control edit** page, and save the result in your Custom Matrix folder.

## Preset information

The Preset information lists the Matrices used in the Preset as well as its keyswitches. All other information can be gathered from the Matrix and Patch listings, so there's not really much to say here. Please note that the Matrices of a Preset can also be switched with MIDI Program Changes (VI: 101–112; VI PRO: 1–127) instead of keyboard notes, and if you like to keep your keyboard free for playing instead of switching, you can disable Preset keyswitching and only use MIDI Program Changes. Vienna Instruments PRO also allows you to define a MIDI Control for Preset keyswitching.

## Abbreviations

Here's a list of abbreviations in Patch names, which will help you to determine a Patch's content even without the help of the Vienna Instruments browser. Please note that not all of the abbreviations may occur in the manual on hand.

Abbreviation	Meaning	Abbreviation	Meaning
150, 160, ...	150, 160, ... BPM (beats per minute)	leg	legato
1s, 2s, ...	1 sec., 2.sec. ... duration	lo	long
all	combination of all Patches of a category	me	medium
cre	crescendo	nA	normal attack
cre5, cre9	crescendo, 5/9 repetitions	noVib	without vibrato
dim	diminuendo	perf-rep	repetition performance
dim5, dim9	diminuendo, 5/9 repetitions	por	portato
dyn	dynamics (crescendo and diminuendo)	RS	release sample
dyn5, dyn9	dynamics, 5/9 repetitions	sA	soft attack
fa	fast	sl	slow
fast-rep	fast repetitions	sta, stac	staccato
flutter	flutter tonguing	str	strong
hA	hard attack	sus	sustained
		Vib	with (medium) vibrato
		XF	cell crossfade Matrix

## Articulations

<b>38 Heckelphone</b>	
<b>01 SHORT + LONG NOTES</b>	Staccato Portato short Portato medium with vibrato Sustained with and without vibrato
<b>02 DYNAMICS</b>	Medium dynamics with vibrato, 1.5/2/3/5 sec. Strong dynamics without vibrato, 1.5/2/3/4/6 sec. Crescendo-diminuendo with vibrato, 2/3/5/8 sec. Fortepiano, sforzato, sforzatissimo with vibrato
<b>03 FLATTER</b>	Flutter tonguing
<b>10 PERF INTERVAL</b>	Legato Marcato
<b>11 PERF INTERVAL FAST</b>	Legato Marcato
<b>12 PERF TRILL</b>	Trills, legato, minor 2nd to major 3rd
<b>13 PERF REPETITION</b>	Legato Portato Staccato Normal and dynamics

## The orchestra

There are several ways of setting up an orchestra, depending on the era of the piece played, the type of the piece and the instruments it requires, and even on the preference of the conductor. The figure below shows one of the more common setups, which can be taken as a guideline for mixing a composition, properly positioning the instruments in the stereo field and adding reverb according to the size of the concert hall you want your piece to be played in.



- |                           |                                 |
|---------------------------|---------------------------------|
| 1 1st and 2nd violin      | 9 Bassoon, contrabassoon        |
| 2 Viola                   | 10/11 Trumpet                   |
| 3 Cello                   | 12/13 Horn                      |
| 4 Double bass             | 14/15 Trombone                  |
| 5 Harp                    | 16 Tuba                         |
| 6 Concert flute, piccolo  | 17 Timpani                      |
| 7 Oboe, English horn      | 18 Drums, cymbals               |
| 8 Clarinet, bass clarinet | 19 other percussion instruments |

## Pitch

For designating pitch, the Vienna Symphonic Library uses International Pitch Notation (IPN), which was agreed upon internationally under the auspices of the Acoustical Society of America. In this system the international standard of A=440 Hz is called A4 and middle C is C4. All pitches are written as capital letters, their respective octave being indicated by a number next to it. The lowest C on the piano is C1 (the A below that is A0), etc.

You can tune your Vienna Instruments to other players, or adjust it to tunings of earlier musical periods by setting the Perform page's Master Tune option within a range of 420 to 460 Hz.

# 38 Heckelphone

## Patches

### 01 SHORT + LONG NOTES

Range: G#2–F5



#### 01 HPH\_staccato

Samples: 198

RAM: 12 MB

Staccato

3 velocity layers: 0–55 p; 56–108 mf; 109–127 f

2 Alternations

#### 02 HPH\_portato\_short

Samples: 198

RAM: 12 MB

Portato, short

3 velocity layers: 0–55 p; 56–108 mf; 109–127 f

2 Alternations

#### 03 HPH\_portato\_medium

Samples: 198

RAM: 12 MB

Portato, medium, with vibrato

3 velocity layers: 0–55 p; 56–108 mf; 109–127 f

2 Alternations

#### 11 HPH\_sus\_Vib

Samples: 198

RAM: 12 MB

Sustained, with vibrato

3 velocity layers: 0–55 p; 56–108 mf; 109–127 f

Release samples

#### 12 HPH\_sus\_noVib

Samples: 132

RAM: 8 MB

Sustained, without vibrato

2 velocity layers: 0–88 p; 89–127 f

Release samples

### 02 DYNAMICS

Range: G#2–F5



#### 01 HPH\_dyn-me\_Vib\_1'5s

Samples: 68

RAM: 4 MB

Medium crescendo and diminuendo with vibrato, 1.5 sec.

2 velocity layers: 0–88 p-mf/mf-p; 89–127 mf-f/f-mf

AB switch: crescendo/diminuendo

#### 02 HPH\_dyn-me\_Vib\_2s

Samples: 68

RAM: 4 MB



Medium crescendo and diminuendo with vibrato, 2 sec.

2 velocity layers: 0–88 p-mf/mf-p; 89–127 mf-f/f-mf

AB switch: crescendo/diminuendo



<b>03 HPH_dyn-me_Vib_3s</b>	<b>Samples: 68</b>	<b>RAM: 4 MB</b>
Medium crescendo and diminuendo with vibrato, 3 sec. 2 velocity layers: 0–88 p-mf/mf-p; 89–127 mf-f/f-mf AB switch: crescendo/diminuendo		
<b>04 HPH_dyn-me_Vib_5s</b>	<b>Samples: 68</b>	<b>RAM: 4 MB</b>
Medium crescendo and diminuendo with vibrato, 5 sec. 2 velocity layers: 0–88 p-mf/mf-p; 89–127 mf-f/f-mf AB switch: crescendo/diminuendo		
<b>11 HPH_dyn-str_noVib_1'5s</b>	<b>Samples: 34</b>	<b>RAM: 2 MB</b>
Strong crescendo and diminuendo without vibrato, 1.5 sec. 1 velocity layer AB switch: crescendo/diminuendo		
<b>12 HPH_dyn-str_noVib_2s</b>	<b>Samples: 34</b>	<b>RAM: 2 MB</b>
Strong crescendo and diminuendo without vibrato, 2 sec. 1 velocity layer AB switch: crescendo/diminuendo		
<b>13 HPH_dyn-str_noVib_3s</b>	<b>Samples: 34</b>	<b>RAM: 2 MB</b>
Strong crescendo and diminuendo without vibrato, 3 sec. 1 velocity layer AB switch: crescendo/diminuendo		
<b>14 HPH_dyn-str_noVib_4s</b>	<b>Samples: 34</b>	<b>RAM: 2 MB</b>
Strong crescendo and diminuendo without vibrato, 4 sec. 1 velocity layer AB switch: crescendo/diminuendo		
<b>15 HPH_dyn-str_noVib_6s</b>	<b>Samples: 34</b>	<b>RAM: 2 MB</b>
Strong crescendo and diminuendo without vibrato, 6 sec. 1 velocity layer AB switch: crescendo/diminuendo		
<b>21 HPH_pfp_Vib_2s</b>	<b>Samples: 34</b>	<b>RAM: 2 MB</b>
Crescendo-diminuendo with vibrato, 2 sec. 2 velocity layers: 0–88 p; 89–127 f		
<b>22 HPH_pfp_Vib_3s</b>	<b>Samples: 34</b>	<b>RAM: 2 MB</b>
Crescendo-diminuendo with vibrato, 3 sec. 2 velocity layers: 0–88 p; 89–127 f		
<b>23 HPH_pfp_Vib_5s</b>	<b>Samples: 34</b>	<b>RAM: 2 MB</b>
Crescendo-diminuendo with vibrato, 5 sec. 2 velocity layers: 0–88 p; 89–127 f		
<b>24 HPH_pfp_Vib_8s</b>	<b>Samples: 17</b>	<b>RAM: 1 MB</b>
Crescendo-diminuendo with vibrato, 8 sec. 1 velocity layer		

<b>31 HPH_fp_Vib</b>	<b>Samples: 33</b>	<b>RAM: 2 MB</b>
Fortepiano, with vibrato 1 velocity layer		
<b>32 HPH_sfz_Vib</b>	<b>Samples: 33</b>	<b>RAM: 2 MB</b>
Sforzato, with vibrato 1 velocity layer		
<b>33 HPH_sffz_Vib</b>	<b>Samples: 33</b>	<b>RAM: 2 MB</b>
Sforzatissimo, with vibrato 1 velocity layer		
<b>03 FLATTER</b>	<b>Range: G#2–F5</b>	
<b>01 HPH_flatter</b>	<b>Samples: 66</b>	<b>RAM: 4 MB</b>
Flutter tonguing, forte 1 velocity layer Release samples		
<b>10 PERF INTERVAL</b>	<b>Range: G#2–F5</b>	
<b>01 HPH_perf-legato</b>	<b>Samples: 818</b>	<b>RAM: 51 MB</b>
Legato Monophonic 2 velocity layers: 0–88 p; 89–127 f Release samples		
<b>02 HPH_perf-marcato</b>	<b>Samples: 818</b>	<b>RAM: 51 MB</b>
Marcato Monophonic 2 velocity layers: 0–88 p; 89–127 f Release samples		

**11 PERF INTERVAL FAST****Range: G#2–F5****01 HPH\_perf-legato\_fa****Samples: 882****RAM: 55 MB**

Legato, fast

Monophonic

2 velocity layers: 0–88 p; 89–127 f

Release samples

**02 HPH\_perf-marcato\_fa****Samples: 882****RAM: 55 MB**

Marcato, fast

Monophonic

2 velocity layers: 0–88 p; 89–127 f

Release samples

**12 PERF TRILL****Range: G#2–F5****01 HPH\_perf-trill****Samples: 2114****RAM: 132 MB**

Performance trills, legato, minor 2nd to major 3rd

Monophonic

2 velocity layers: 0–88 p; 89–127 f

Release samples

**13 PERF REPETITION****Range: G#2–F5****01 HPH\_perf-rep\_leg****Samples: 170****RAM: 10 MB**

Repetition performances: Legato

2 velocity layers: 0–88 p; 89–127 f

**02 HPH\_perf-rep\_por****Samples: 288****RAM: 18 MB**

Repetition performances: Portato

2 velocity layers: 0–88 p; 89–127 f

**03 HPH\_perf-rep\_sta****Samples: 288****RAM: 18 MB**

Repetition performances: Staccato

2 velocity layers: 0–88 p; 89–127 f

**11 HPH\_perf-rep\_dyn5\_leg****Samples: 170****RAM: 10 MB**

Repetition performances: Legato dynamics, 5 repetitions

1 velocity layer

AB switch: crescendo/diminuendo

**12 HPH\_perf-rep\_dyn5\_por****Samples: 160****RAM: 10 MB**

Repetition performances: Portato dynamics, 5 repetitions

1 velocity layer

AB switch: crescendo/diminuendo

**13 HPH\_perf-rep\_dyn9\_sta****Samples: 288****RAM: 18 MB**

Repetition performances: Staccato dynamics, 9 repetitions

1 velocity layer

AB switch: crescendo/diminuendo

**98 RESOURCES**

Isolated dynamics repetitions: Legato, portato, staccato

Single layer long notes

**01 Perf Rep dyn****Range: G#2–F5****01 HPH\_rep\_cre5\_leg-1 (2/3/4/5)****Samples: 17****RAM: 1 MB**

Extracted repetition

Legato, crescendo, 1st to 5th note

1 velocity layer

**01 HPH\_rep\_dim5\_leg-1 (2/3/4/5)****Samples: 17****RAM: 1 MB**

Extracted repetition

Legato, diminuendo, 1st to 5th note

1 velocity layer

**02 HPH\_rep\_cre5\_por-1 (2/3/4/5)****Samples: 16****RAM: 1 MB**

Extracted repetition

Portato, crescendo, 1st to 5th note

1 velocity layer

**02 HPH\_rep\_dim5\_por-1 (2/3/4/5)****Samples: 16****RAM: 1 MB**

Extracted repetition

Portato, diminuendo, 1st to 5th note

1 velocity layer

**03 HPH\_rep\_cre9\_sta-1 (2/3/4/5/6/7/8/9)****Samples: 16****RAM: 1 MB**

Extracted repetition

Staccato, crescendo, 1st to 9th note

1 velocity layer

**03 HPH\_rep\_dim9\_sta-1 (2/3/4/5/6/7/8/9)****Samples: 16****RAM: 1 MB**

Extracted repetition

Staccato, diminuendo, 1st to 9th note

1 velocity layer

**02 Long Notes - Single Layer****Range: G#2–F5****01 HPH\_sus\_p****Samples: 66****RAM: 4 MB**

Sustained, piano  
 1 velocity layer  
 Release samples

**02 HPH\_sus\_mf****Samples: 66****RAM: 4 MB**

Sustained, mezzoforte  
 1 velocity layer  
 Release samples

**03 HPH\_sus\_f****Samples: 66****RAM: 4 MB**

Sustained, forte  
 1 velocity layer  
 Release samples

**99 RELEASE**

This section contains release samples for various patches of the other sections. Please do not try to load them into a Vienna Instruments matrix – you will not be able to hear anything when you try to play them.

# Matrices

## Matrix - LEVEL 1

### L1 HPH Articulation Combi

Samples: 726

RAM: 45 MB

Single note articulations

Staccato, portato short, sustained with vibrato, fortissimo and sforzato with vibrato, flutter tonguing

**Matrix switches:** Horizontal: Keyswitches, C1–D#1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1
V1	staccato	sus. vib.	fp vib.	flutter
V2	portato short	sus. vib.	sfz vib.	flutter

### L1 HPH Perf-Legato Speed

Samples: 1006

RAM: 62 MB

Interval performances: Legato normal and fast

Speed controller

**Matrix switches:** Horizontal: Speed, 2 zones

	H1	H2
legato	normal speed	fast

## Matrix - LEVEL 2 A - Advanced

### 01 HPH Perf-Universal

Samples: 1946

RAM: 121 MB

Interval performances: Legato normal and fast

Marcato normal and fast

Speed controller

**Matrix switches:** Horizontal: Speed, 2 zones Vertical: Modwheel, 2 zones

	H1	H2
legato	normal	fast
marcato	normal	fast

### 02 HPH Perf-Trill Speed

Samples: 2354

RAM: 147 MB

Multi interval performances: Legato and trills

Speed controller

**Matrix switches:** Horizontal: Speed, 2 zones

	H1	H2
V1	legato	trills

### 03 HPH Short+Long notes - All

Samples: 858

RAM: 53 MB

Single notes

Staccato

Portato short and medium

Sustained with and without vibrato

**Matrix switches:** Horizontal: Keyswitches, C1–D#1 Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1
V1	staccato	portato short	portato medium	sus. vib.
V2	%	%	%	sus. no vib.

**Matrix - LEVEL 2 B - Standard****11 HPH Perf-Legato Speed****Samples: 1006 RAM: 62 MB**

Interval performances: Legato normal and fast

Speed controller

**Matrix switches:** Horizontal: Speed, 2 zones

	H1	H2
legato	normal speed	fast

**12 HPH Perf-Marcato Speed****Samples: 1006 RAM: 62 MB**

Interval performances: Marcato normal and fast

Speed controller

**Matrix switches:** Horizontal: Speed, 2 zones

	H1	H2
marcato	normal speed	fast

**13 HPH Dynamics****Samples: 507 RAM: 31 MB**

Dynamics

Medium crescendo and diminuendo with vibrato 2, 3, and 5 sec.

Strong crescendo and diminuendo without vibrato 2, 3, and 4 sec.

Crescendo-diminuendo with vibrato 2, 3, and 5 sec.

Fortepiano, sforzato, sforzatissimo with vibrato

**Matrix switches:** Horizontal: Keyswitches, C1–D1 Vertical: Modwheel, 4 zones

	C1	C#1	D1
V1	med. dyn. vib. 2 sec.	med. dyn. vib. 3 sec.	med. dyn. vib. 5 sec.
V2	strong dyn. no vib. 2 sec.	strong dyn. no vib. 3 sec.	strong dyn. no vib. 4 sec.
V3	ppp vib. 2 sec.	ppp vib. 3 sec.	ppp vib. 5 sec.
V4	fp vib.	sfz vib.	sfz vib.

**14 HPH Flatter****Samples: 66 RAM: 4 MB**

Flutter tonguing

**Matrix - LEVEL 2 C - Repetitions****21 HPH Perf-Repetitions - Combi****Samples: 746 RAM: 46 MB**

Repetition performances

Legato, portato, and staccato

**Matrix switches:** Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	legato	portato	staccato

**22 HPH Perf-Repetitions - Speed****Samples: 746    RAM: 46 MB**

Repetition performances  
 Legato, portato, and staccato  
 Speed controller

**Matrix switches:** Horizontal: Speed, 3 zones

	H1	H2	H3
V1	legato	portato	staccato

**Matrix - LEVEL 2 E - Keyswitch Vel****31 HPH Legato - cre5****Samples: 85    RAM: 5 MB**

Legato notes: Crescendo, keyswitch velocity  
 Keyswitches control 5 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
velocity	1st	2nd	3rd	4th	5th

**32 HPH Portato - cre5****Samples: 80    RAM: 5 MB**

Portato notes: Crescendo, keyswitch velocity  
 Keyswitches control 5 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
velocity	1st	2nd	3rd	4th	5th

**33 HPH Staccato - cre9****Samples: 144    RAM: 9 MB**

Staccato notes: Crescendo, keyswitch velocity  
 Keyswitches control 9 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

**34 HPH Combi - cre5****Samples: 165    RAM: 10 MB**

Legato and portato: Crescendo, keyswitch velocity  
 Keyswitches control 5 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–E1    Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1
legato	1st	2nd	3rd	4th	5th
portato	1st	%	%	%	%

**35 HPH Legato - dim5****Samples: 85    RAM: 5 MB**

Legato notes: Diminuendo, keyswitch velocity  
 Keyswitches control 5 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
velocity	1st	2nd	3rd	4th	5th



**36 HPH Portato - dim5****Samples: 80****RAM: 5 MB**

Portato notes: Diminuendo, keyswitch velocity

Keyswitches control 5 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
velocity	1st	2nd	3rd	4th	5th

**37 HPH Staccato - dim9****Samples: 144****RAM: 9 MB**

Staccato notes: Diminuendo, keyswitch velocity

Keyswitches control 9 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–G#1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1
velocity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th

**38 HPH Combi - dim5****Samples: 165****RAM: 10 MB**

Legato and portato: Diminuendo, keyswitch velocity

Keyswitches control 5 dynamic steps

**Matrix switches:** Horizontal: Keyswitches, C1–E1      Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1
legato	1st	2nd	3rd	4th	5th
portato	1st	%	%	%	%

## Presets

### HPH VSL Preset Level 1

**Samples: 1666   RAM: 104 MB**

L1 HPH Perf-Legato Speed  
 L1 HPH Articulation Combi  
 Preset Keyswitches: C2–C#2

### HPH VSL Preset Level 2

**Samples: 5053   RAM: 315 MB**

01 HPH Perf-Universal  
 02 HPH Perf-Trill Speed  
 L1 HPH Articulation Combi  
 21 HPH Perf-Repetitions - Combi  
 34 HPH Combi - cre5  
 Preset Keyswitches: C2–E2